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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 09/652,878 Theodore M. Taylor 4372US (99-1187) 3858 08/31/2000 EXAMINER 24247 10/23/2003 TRASK BRITT ELEY, TIMOTHY V P.O. BOX 2550 ART UNIT PAPER NUMBER SALT LAKE CITY, UT 84110 3724

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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· · · · · · · · · · · · · · · · · · ·		Application No.	Applicant(s)	
		09/652,878	TAYLOR, THEODO	ORE M.
	Office Action Summary	Examiner	Art Unit	<u> </u>
		Timothy V Eley	3724	
Period fo	The MAILING DATE of this communication app	pears on the cover sheet v	vith the correspondence add	lress
A SH THE - Exte after - If the - If NO - Failu - Any	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl o period for reply is specified above, the maximum statutory period vare to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a y within the statutory minimum of th will apply and will expire SIX (6) MO	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this cor	nmunication.
1)	Responsive to communication(s) filed on 04 /	August 2003 .		
2a)⊠		nis action is non-final.		
3)□	Since this application is in condition for allowations closed in accordance with the practice under			merits is
· ·	ion of Claims			
4)⊠	Claim(s) 1-23 and 40-54 is/are pending in the			
	4a) Of the above claim(s) <u>3,5,19,21 and 51</u> is/a	are withdrawn from consid	deration.	
5)⊠	Claim(s) 40-48 is/are allowed.			
6)⊠	Claim(s) <u>1,2,6-11,13,17,18,20,22,49,50,52 and</u>	d 54 is/are rejected.		
7)⊠	Claim(s) <u>4,12,14-16 and 23</u> is/are objected to.			
8)□ Applicat	Claim(s) are subject to restriction and/o ion Papers	r election requirement.		
9)	The specification is objected to by the Examine	r.		
10)	The drawing(s) filed on is/are: a)□ accep	oted or b) objected to by	the Examiner.	
	Applicant may not request that any objection to the	e drawing(s) be held in abey	/ance. See 37 CFR 1.85(a).	
11)	The proposed drawing correction filed on	_ is: a)□ approved b)□ -	disapproved by the Examine	۲.
	If approved, corrected drawings are required in re	ply to this Office action.		
12)	The oath or declaration is objected to by the Ex	aminer.		
Priority (	ınder 35 U.S.C. §§ 119 and 120			
13)	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a)	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority document	s have been received.		
	2. Certified copies of the priority document	s have been received in A	Application No	
* 1	3. Copies of the certified copies of the prio application from the International Bu	reau (PCT Rule 17.2(a)).		Stage
	See the attached detailed Office action for a list			
	Acknowledgment is made of a claim for domesti			application).
	i) ∐ The translation of the foreign language pro Acknowledgment is made of a claim for domest			
Attachmen				
2) 🔲 Notic	e of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) 🔲 Notice of	Summary (PTO-413) Paper No(s Informal Patent Application (PTO	

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#### DETAILED ACTION

## Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claims 1,2,6,7,11,13,17,18, and 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Walker'800 et al.

Walker et al disclose an apparatus for polishing one or more layers of a semiconductor device structure, comprising; a polishing pad(440); a subpad support(451a) located adjacent the polishing pad, the subpad support including a subpad retention element(456); and a subpad(450) located between the subpad support and the polishing pad a removably secured to the subpad support by way of the subpad retention element while remaining unsecured relative to the polishing pad. See figure 7 and column 8, lines 61-end to column 9, lines 1-35.

Regarding claim 6, the platen(420) functions as a substantially rigid structure on a bottom surface of the subpad.

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pad.

Regarding claims 11 and 22, element 456 functions as a "lip".

9. Claims 17,18,20,49,50,52, and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Vander Voort, as applied in the rejection beginning on page 2 of paper number 13. Since applicant has not positively recited the polishing pad in combination with the subpad support and a subpad, the subpad support may be used for retaining a subpad which is configured to support at least a portion of a polishing pad of the apparatus and not be secured to the polishing

## Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 8,9, and 10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Walker'800 et al.
  - a. Walker et al is explained above.
  - b. Walker et al does not disclose that the substantially rigid structure comprises a polymer or a metal, or a dense region of the subpad at the bottom surface thereof.
  - c. However, the exact material of the substantially rigid structure (420) would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has

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been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Also, an ordinary artisan skilled in the art would have known that the element 420 could have been made of polymer or metal since Walker et al appears to be silent as to the exact material of the element.

d. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the element 450 and the element 420, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1993).

## Response to Arguments

- 12. Applicant's arguments filed August 04, 2003 have been fully considered but they are not persuasive.
  - a. Applicant argues that the magnetic element 30 (which the Office apparently believes to be analogous to the subpad support of independent claim 49) is configured to retain a barrier element 80 (which the Office apparently believes to be analogous to a subpad); and that the magnetic element 30 of Vander Voort is not configured to retain the barrier element 80 in such a way that the barrier element 80 remains unsecured relative to the grinding or polishing preparation element 70.

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i. Firstly, it should be noted that the Office refers to element 10 as the subpad support.

- ii. Secondly, the element 10 is configured to maintain the element 80 in position; and since applicant is not reciting the polishing pad in combination with the subpad support, the element 80 may be maintained in a nonsecured relation relative to a polishing pad if so desired. The element 10 anticipates the subpad support as recited in claim 49 since it teaches each and every element positively recited by applicant.
- b. Applicant argues that that the magnetic element 30 is not configured to apply a negative pressure to a bottom surface of the barrier element 80 thereof, and that it is well known that a magnetic field is not a negative pressure.
  - i. However, again it should be noted that opposite magnetic fields attract, and the same magnetic fields repel (therefore, producing a negative "pressure"). Again since applicant is only reciting a subpad support, the Vander Voort element 10, in combination with element 30 can be used to apply a "negative" pressure on a subpad by using a magnetic field which is repelled by the element 10 in combination with element 30.

Allowable Subject Matter

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7. Claims 4,12,14-16,23, and 53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 40-48 are allowed.

#### Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy V Eley whose telephone number is 703-308-1824. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N Shoap can be reached on 703-308-

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1082. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

rimothy V Elev Primary Examiner Art Unit 3724 Page 7

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